

Claims

1 1. A system for generating display presentations on a user
2 computer, said system consisting of:

3 a communication network for connecting a user computer to the
4 system, said user computer capable of generating a web page request, said
5 user computer also capable of receiving and executing a web page containing
6 an HTML page and receiving and executing at least one applet;

7 a web server for receiving said web page request from the user
8 computer and for serving said web page and said at least one applet to the
9 user computer over said communication network, said web server further for
10 serving servlets according to a document retrieved by said web server
11 according to said web page request.

12 an HTML template comprising display information including SParser
13 commands and display data information, said HTML template used for
14 generating a display presentation on the user computer according to a pre-
15 defined format;

16 a servlet engine for executing servlets served by said web server
17 according to said web page request from the user computer;

18 an SParser application for interpreting said HTML template, said
19 SParser application activated by the execution of said servlet by said servlet
20 engine;

21 a database server for retrieving database data from at least one
22 database for serving to said SParser application, wherein said SParser
23 application requests said database data according to data information
24 embedded within said HTML template or embedded within said web page
25 request, said database server also for serving said HTML template from a
26 template database to said SParser application;

27 wherein said SParser generates said web page containing said HTML
28 page containing a reference to said at least one applet, said web page
29 generated according to said web page request and containing some portion of
30 said database data, said SParser further embedding modified data in said

31 web page, said modified data generated according to some subset of said
32 SParser commands and utilizing said database data; and
33 further wherein said web server serves said web page and said applet
34 to said user computer for directing said user computer to generate a display
35 presentation according to said pre-defined format modified according to said
36 database data.

1 2. The system according to claim 1, wherein said at least one
2 applet comprises a plurality of applets, said plurality of applets including:
3 graphing applets for generating graphical diagrams;
4 table producing applets for generating tables; and
5 multimedia applets for generating multimedia presentations.

1 3. The system according to claim 1, wherein said at least one
2 database comprises a plurality of databases including:
3 a template database;
4 a survey data database;
5 a sample and administrative data database; and
6 a normative data database.

1 4. The system according to claim 1, wherein said template further
2 comprises
3 title information;
4 descriptive data for labeling said display presentation; and
5 JavaScript code to communicate size and location information to said
6 at least one applet for directing the size and location of a graph or a table
7 included in said display presentation.

1 5. The system according to claim 4, wherein said SParser
2 application comprises:
3 macro processing services for execution said SParser commands
4 including macros;

5 output services for translating transforming database data to conform
6 to HTML or JavaScript requirements;
7 database access services for maintaining connections to said database
8 server, issuing Structured Query Language statements to said database
9 server, and opening and closing result sets;
10 test data identification and deletion services for deleting said test data
11 from said template;
12 Query parsing services for standardizing, interpreting, and decoding an
13 HTML queries;
14 error processing services for identifying error conditions and for
15 generating error messages and also for providing query redirection when
16 necessary; and
17 context maintenance for storing information provided by a user to said
18 user computer that identify user privileges used for ensuring that said user is
19 allowed system access, display preferences for customizing said display
20 presentation, or analysis conditions also for customizing said display
21 presentation.

1 6. A method for generating a web page for display on a user
2 computer, comprising the steps of:
3 receiving a web page request for generating a display presentation
4 from a user computer;
5 executing a servlet corresponding to said web page request;
6 retrieving an HTML template corresponding to said executed servlet;
7 interpreting said HTML template including the steps of:
8 retrieving retrieved data from a database according to said
9 servlet execution;
10 executing commands referenced in said HTML template, said
11 commands for generating a display web page utilizing said retrieved
12 data;

13 serving said display web page to said user computer, said
14 display web page for generating a display presentation on said user
15 computer.

1 7. A method for generating a display presentation on a user
2 computer, comprising the steps of:

3 connecting a user computer to a web server over a network;
4 validating said user computer;
5 accepting a web page request from said user computer;
6 determining if said web page request is for generating said display
7 presentation;
8 executing a servlet corresponding to said web page request if it was
9 determined that said web page request was for generating said display
10 presentation;
11 retrieving an HTML template corresponding to said executed servlet;
12 interpreting said HTML template including the steps of:
13 retrieving retrieved data from a database according to said
14 servlet execution, said retrieved data including:
15 survey data and normative data for generating custom
16 display presentations; and
17 descriptive data for labeling said display presentation
18 stripping test data from said HTML template;
19 embedding some portion of said retrieved data in said HTML
20 template, wherein some further portion of some portion of said
21 retrieved data replaces said stripped test data;
22 executing commands referenced in said HTML template, said
23 commands for generating a display web page utilizing said retrieved
24 data;
25 serving said display web page to said user computer, said
26 display web page for generating a display presentation including a
27 graphical diagram, a table, or a multi-medial presentation on said user
28 computer.

1 8. A system for generating a web page for display on a user
2 computer, comprising:
3 means for receiving a web page request for generating a display
4 presentation;
5 means for executing a servlet corresponding to said web page request;
6 means for retrieving an HTML template corresponding to said executed
7 servlet;
8 means for interpreting said HTML template including:
9 means for retrieving retrieved data from a database according to
10 said servlet execution;
11 means for executing commands referenced in said HTML
12 template, said commands for generating a display web page utilizing
13 said retrieved data;
14 means for serving said display web page to said user computer,
15 said display web page for generating a display presentation on said
16 user computer.

1 9. A system for generating a display presentation on a user
2 computer, comprising the steps of:
3 means for connecting a user computer to a web server over a network;
4 means for validating said user computer;
5 means for accepting web page requests from said user computer;
6 means for determining if said web page request is for generating said
7 display presentation;
8 means for executing a servlet corresponding to said web page request
9 if it was determined that said web page request was for generating said
10 display presentation;
11 means for retrieving an HTML template corresponding to said executed
12 servlet;
13 means for interpreting said HTML template including:

means for retrieving retrieved data from a database according to said servlet execution, said retrieved data including:

- survey data and normative data for generating custom display presentations; and
- descriptive data for labeling said display presentation

means for stripping test data from said HTML template;

means for embedding some portion of said retrieved data in said HTML template, wherein some further portion of some portion of said retrieved data replaces said stripped test data;

means for executing commands referenced in said HTML template, said commands for generating a display web page utilizing said retrieved data;

means for serving said display web page to said user computer, said display web page for generating a display presentation including a graphical diagram, a table, or a multi-medial presentation on said user computer.

10. A method for generating a plurality of display presentations on a user computer comprising the steps of:

generating a plurality of HTML templates, each HTML template for generating a different display presentation, the generation of each HTML template comprising the steps of:

designing an applet for serving to a user computer, said applet designed by an applet programmer;

designing a data-enhanced HTML test page, said HTML test page designed by a database programmer, wherein said HTML test page contains SPParser instructions capable of utilizing said applet to generate an unformatted test display presentation utilizing test data embedded in said HTML test page;

designing an HTML template from said data-enhanced HTML test page, said HTML template designed by a style programmer, said HTML template for generating a formatted test display presentation

16 utilizing said test data embedded in said HTML test page and utilizing
17 said applet; and
18 storing said HTML template in a database, said HTML template
19 referencing said applet;
20 receiving a web page request for generating a desired display
21 presentation from a user computer;
22 retrieving the corresponding HTML template for generating said
23 desired display presentation;
24 retrieving stored data corresponding to said desired display
25 presentation;
26 generating a display web page based on said corresponding HTML
27 template utilizing said retrieved stored data in place of said test data and
28 referencing its corresponding applet; and
29 serving said display web page and its corresponding applet to said user
30 computer, said display web page for generating said desired display
31 presentation on said user computer.

1 11. A system for generating a plurality of display presentations on a
2 user computer comprising the steps of:
3 means for generating a plurality of HTML templates, each HTML
4 template for generating a different display presentation, the generation of
5 each HTML template comprising:
6 means for designing an applet for serving to a user computer,
7 said applet designed by an applet programmer;
8 means for designing a data-enhanced HTML test page, said
9 HTML test page designed by a database programmer, wherein said
10 HTML test page contains SParse instructions capable of utilizing said
11 applet to generate an unformatted test display presentation utilizing
12 test data embedded in said HTML test page;
13 means for designing an HTML template from said data-
14 enhanced HTML test page, said HTML template designed by a style
15 programmer, said HTML template for generating a formatted test

16 display presentation utilizing said test data embedded in said HTML
17 test page and utilizing said applet; and
18 means for storing said HTML template in a database, said
19 HTML template referencing said applet;
20 means for receiving a web page request for generating a desired
21 display presentation from a user computer;
22 means for retrieving the corresponding HTML template for generating
23 said desired display presentation;
24 means for retrieving stored data corresponding to said desired display
25 presentation;
26 means for generating a display web page based on said corresponding
27 HTML template utilizing said retrieved stored data in place of said test data and
28 referencing its corresponding applet; and
29 means for serving said display web page and its corresponding applet to
30 said user computer, said display web page for generating said desired display
31 presentation on said user computer.